FIGURE 1

Granulator (10) — Cooling Gas

Screen (11) — Undersize — (Optional)

Oversize — **On-Size**

Mill (12)

Heat Exchanger (5) — (Optional)

Vent

Feeder (4) — Absorbent

Pump (6) — Water

Heat (7)

Blender (3)

Heat (8)

Feeder (9)

Pump (2)

Vessel (1) — Gelling Material, Fertilizer Nutrient

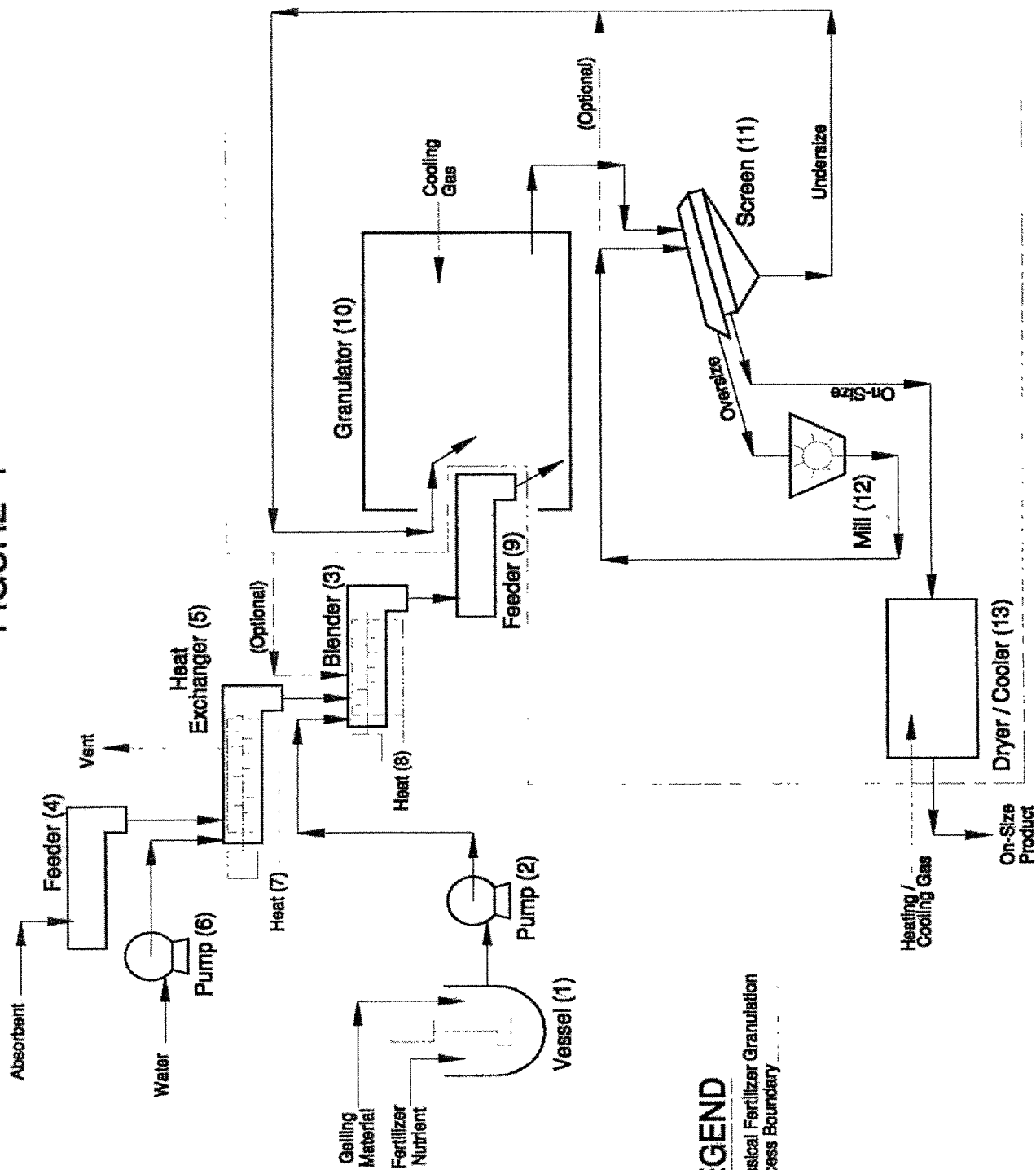**Dryer / Cooler (13)** — Heating / Cooling Gas — On-Size Product
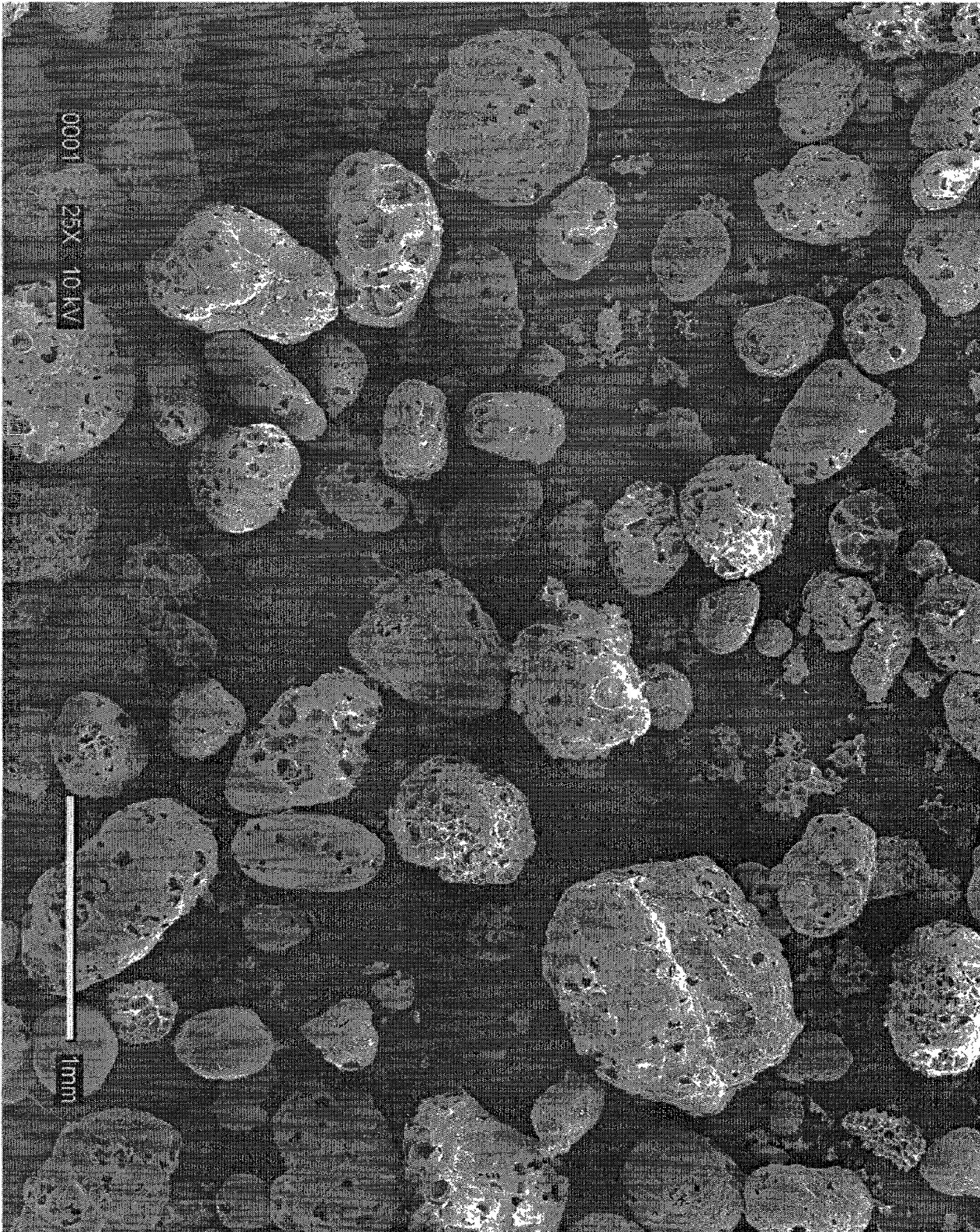
LEGEND

Classical Fertilizer Granulation
Process Boundary

Figure 2

Figure 3

Figure 4
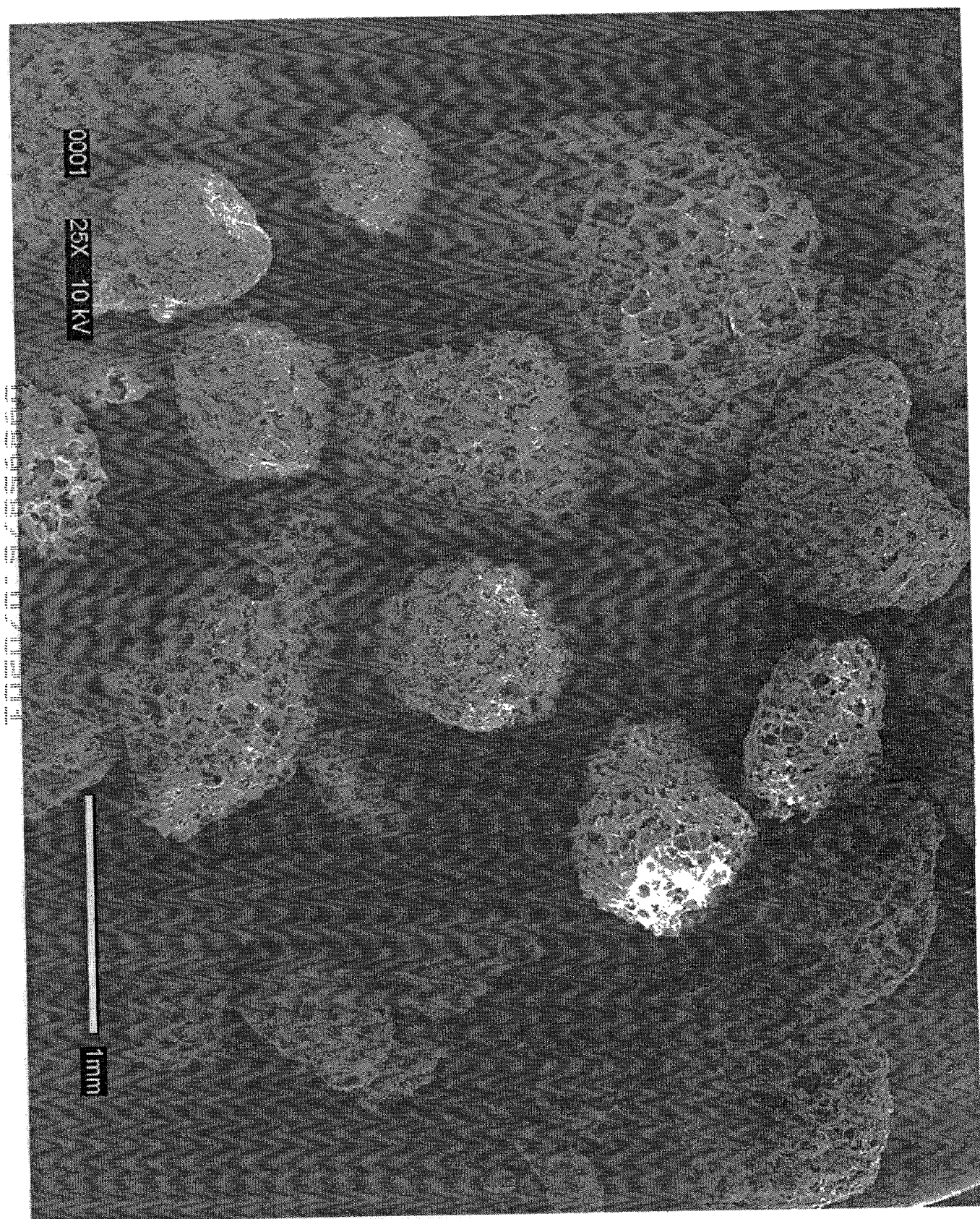
Figure 5
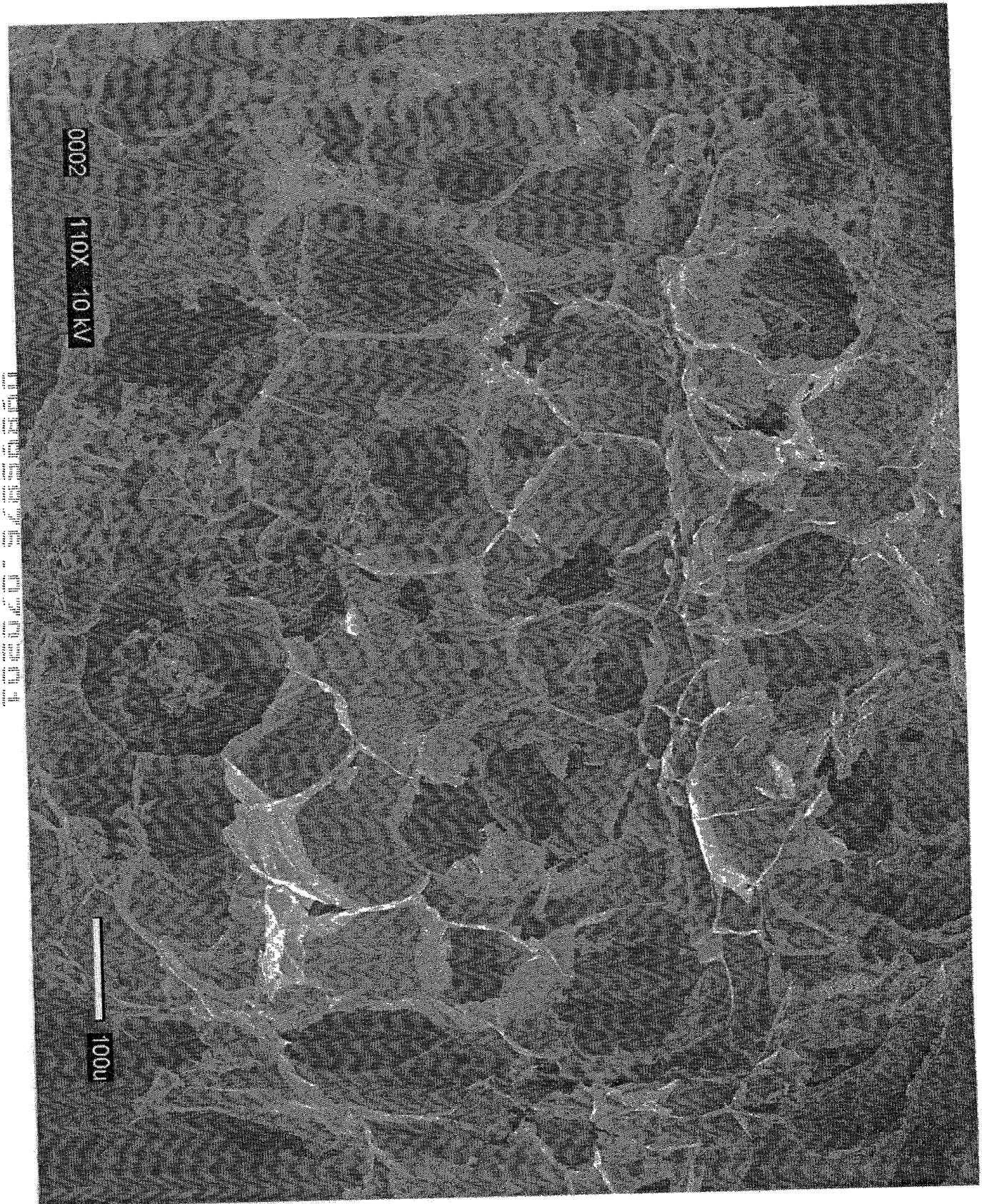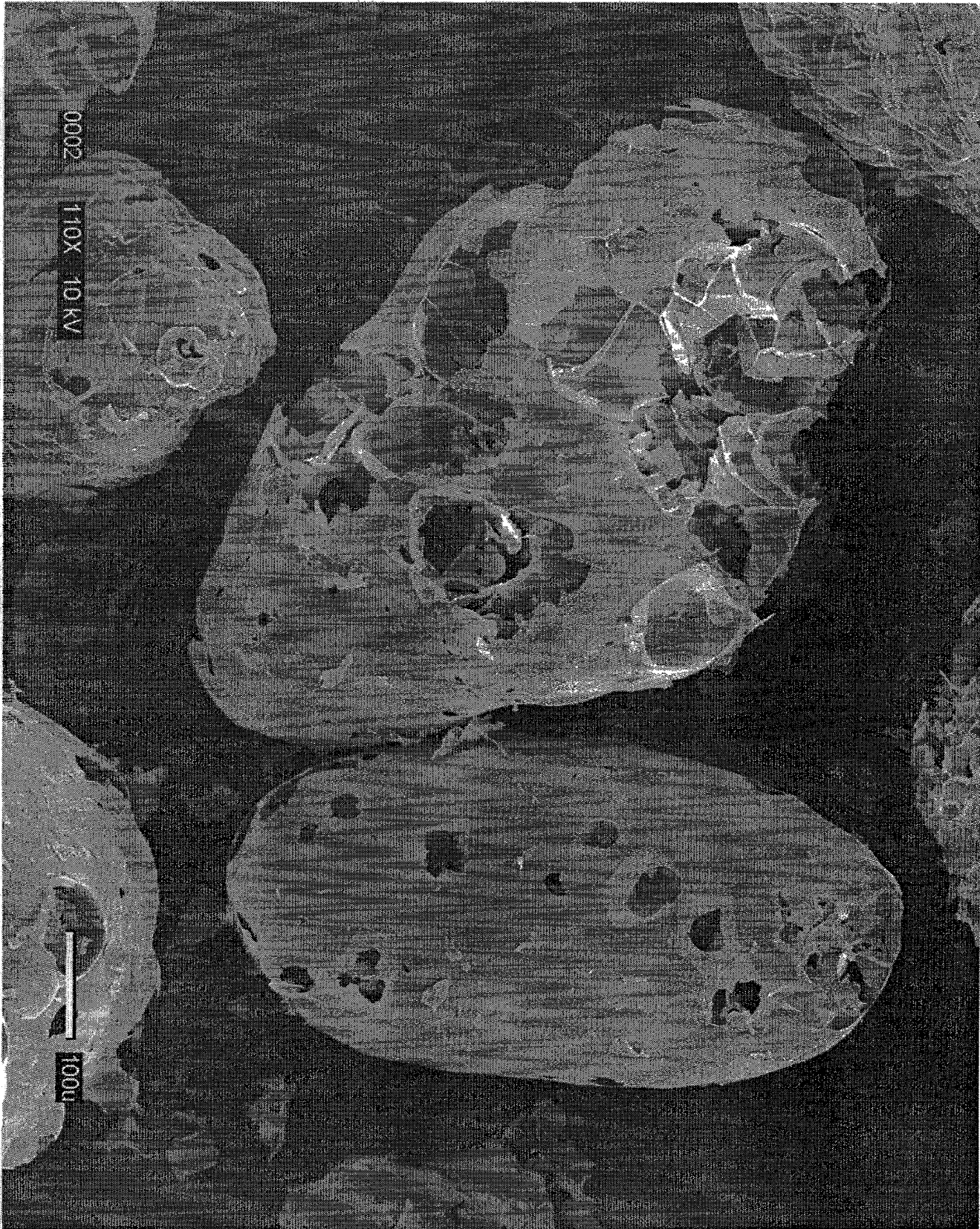
FIGURE 6

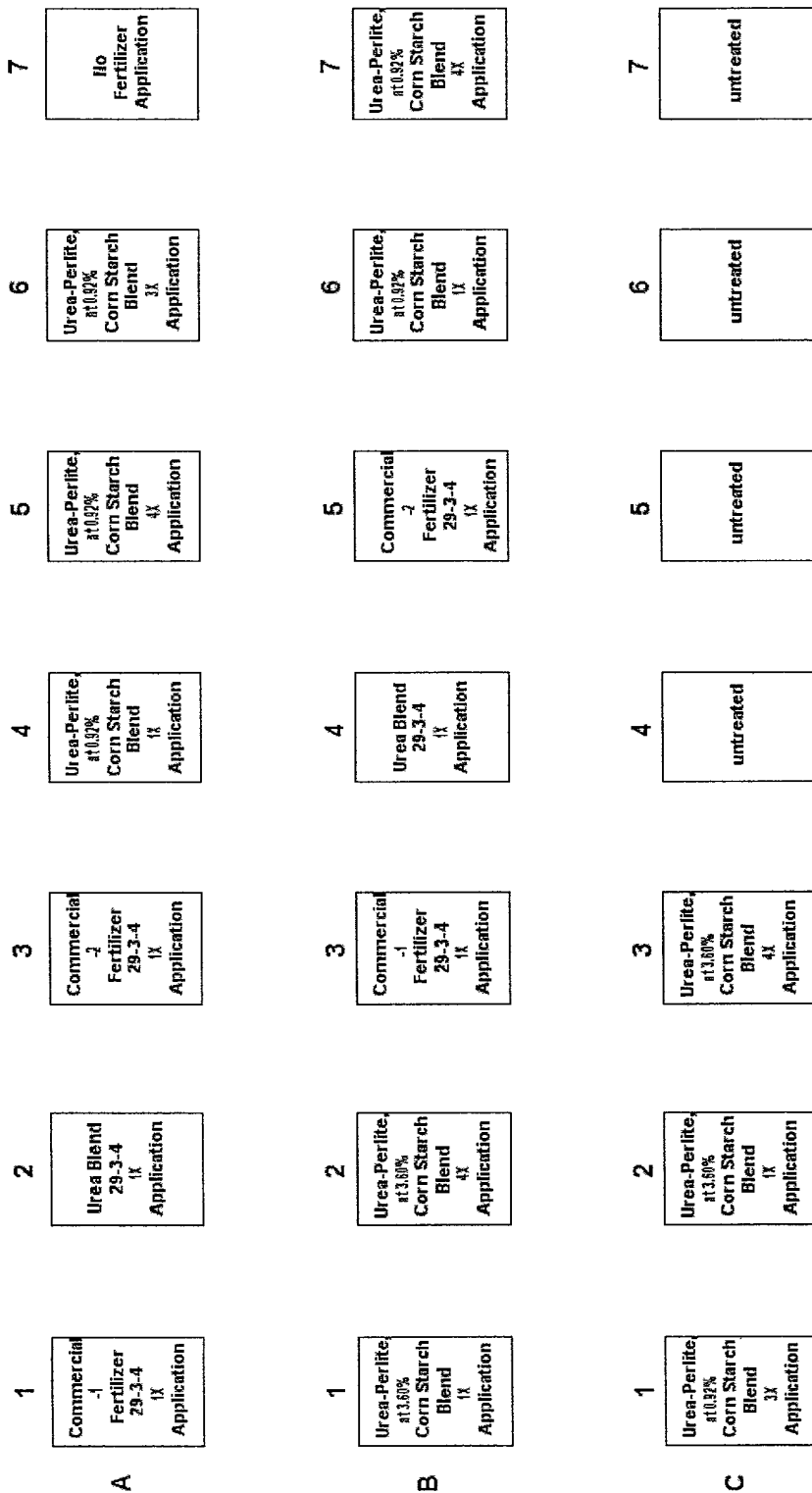|	1	2	3	4	5	6	7
A	Commercial -1 Fertilizer 29-3-4 1X Application	Urea Blend 29-3-4 1X Application	Commercial -2 Fertilizer 29-3-4 1X Application	Urea-Perlite, at 0.92% Corn Starch Blend 1X Application	Urea-Perlite, at 0.92% Corn Starch Blend 4X Application	Urea-Perlite, at 0.92% Corn Starch Blend 3X Application	No Fertilizer Application
B	Urea-Perlite, at 3.60% Corn Starch Blend 1X Application	Urea-Perlite, at 3.60% Corn Starch Blend 4X Application	Commercial -1 Fertilizer 29-3-4 1X Application	Urea Blend 29-3-4 1X Application	Commercial -2 Fertilizer 29-3-4 1X Application	Urea-Perlite, at 0.92% Corn Starch Blend 1X Application	Urea-Perlite, at 0.92% Corn Starch Blend 4X Application
C	Urea-Perlite, at 0.92% Corn Starch Blend 3X Application	Urea-Perlite, at 3.60% Corn Starch Blend 1X Application	Urea-Perlite, at 3.60% Corn Starch Blend 4X Application	untreated	untreated	untreated	untreated

Plot Size = 5 feet X 15 feet = 75 square feet

Standard Rate of Application = 1lb N/1000 sq. ft.

$= 0.10$lb P_2O_5/1000 sq. ft.

$= 0.13$lb K_2O/1000 sq. ft.

X = Standard Rate Of Application, prefix number equals multiplication of that standard rate applied to the plot